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Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=9; day=23; hr=13; min=47; sec=2; ms=955;]

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Reviewer Comments:

<210> 3

<211> 1647

<212> DNA

<213> Escherichia coli

<220>

<221> misc_feature

<223> GroEL-Asp490Cys DNA sequence

<220>

<221> mutation

<222> (1468)..(1470)

<223> GAC to TCG

<400> 3

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The above <223> response describing the base mutation at location 1468-1470 is incorrect: the mutation is "tgc" not "tcg".

Application No:	10583179	Version No:	1.0
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<120> Protein Separation Device

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<140> 10583179

<141> 2008-08-25

<150> US 60/530,608

<151> 2003-12-19

<160> 8

<170> PatentIn version 3.3

<210> 1

<211> 1647

<212> DNA

<213> Escherichia coli

<220>

<221> misc_feature

<223> GroEL wildtype DNA sequence

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<212> PRT
<213> Escherichia coli

<220>
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<223> GroEL wildtype amino acid sequence

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Pro Lys Gly Arg Asn Val Val Leu Asp Lys Ser Phe Gly Ala Pro Thr
35 40 45

Ile Thr Lys Asp Gly Val Ser Val Ala Arg Glu Ile Glu Leu Glu Asp
50 55 60

Lys Phe Glu Asn Met Gly Ala Gln Met Val Lys Glu Val Ala Ser Lys
65 70 75 80

Ala Asn Asp Ala Ala Gly Asp Gly Thr Thr Thr Ala Thr Val Leu Ala
85 90 95

Gln Ala Ile Ile Thr Glu Gly Leu Lys Ala Val Ala Ala Gly Met Asn
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Pro Met Asp Leu Lys Arg Gly Ile Asp Lys Ala Val Thr Ala Ala Val
115 120 125

Glu Glu Leu Lys Ala Leu Ser Val Pro Cys Ser Asp Ser Lys Ala Ile
130 135 140

Ala Gln Val Gly Thr Ile Ser Ala Asn Ser Asp Glu Thr Val Gly Lys
145 150 155 160

Leu Ile Ala Glu Ala Met Asp Lys Val Gly Lys Glu Gly Val Ile Thr
165 170 175

Val Glu Asp Gly Thr Gly Leu Gln Asp Glu Leu Asp Val Val Glu Gly
180 185 190

Met Gln Phe Asp Arg Gly Tyr Leu Ser Pro Tyr Phe Ile Asn Lys Pro
195 200 205

Glu Thr Gly Ala Val Glu Leu Glu Ser Pro Phe Ile Leu Leu Ala Asp
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Lys Lys Ile Ser Asn Ile Arg Glu Met Leu Pro Val Leu Glu Ala Val

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Val Ala Ala Val Lys Ala Pro Gly Phe Gly Asp Arg Arg Lys Ala Met						
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Leu Gln Asp Ile Ala Thr Leu Thr Gly Gly Thr Val Ile Ser Glu Glu						
	290		295		300	
Ile Gly Met Glu Leu Glu Lys Ala Thr Leu Glu Asp Leu Gly Gln Ala						
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Lys Arg Val Val Ile Asn Lys Asp Thr Thr Thr Ile Ile Asp Gly Val						
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Gly Glu Glu Ala Ala Ile Gln Gly Arg Val Ala Gln Ile Arg Gln Gln						
	340		345		350	
Ile Glu Glu Ala Thr Ser Asp Tyr Asp Arg Glu Lys Leu Gln Glu Arg						
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Val Ala Lys Leu Ala Gly Gly Val Ala Val Ile Lys Val Gly Ala Ala						
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His Ala Thr Arg Ala Ala Val Glu Glu Gly Val Val Ala Gly Gly Gly						
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Val Ala Leu Ile Arg Val Ala Ser Lys Leu Ala Asp Leu Arg Gly Gln						
	420		425		430	
Asn Glu Asp Gln Asn Val Gly Ile Lys Val Ala Leu Arg Ala Met Glu						
	435		440		445	
Ala Pro Leu Arg Gln Ile Val Leu Asn Cys Gly Glu Glu Pro Ser Val						
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Val Ala Asn Thr Val Lys Gly Gly Asp Gly Asn Tyr Gly Tyr Asn Ala						
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Ala Thr Glu Glu Tyr Gly Asn Met Ile Asp Met Gly Ile Leu Asp Pro						
	485		490		495	
Thr Lys Val Thr Arg Ser Ala Leu Gln Tyr Ala Ala Ser Val Ala Gly						
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Leu Met Ile Thr Thr Glu Cys Met Val Thr Asp Leu Pro Lys Asn Asp						
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530 535 540

Gly Gly Met Met
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<210> 3
<211> 1647
<212> DNA
<213> Escherichia coli

<220>
<221> misc_feature
<223> GroEL-Asp490Cys DNA sequence

<220>
<221> mutation
<222> (1468)..(1470)
<223> GAC to TCG

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<210> 4
<211> 548
<212> PRT
<213> Escherichia coli

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<220>
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          20          25          30
Pro Lys Gly Arg Asn Val Val Leu Asp Lys Ser Phe Gly Ala Pro Thr
          35          40          45

Ile Thr Lys Asp Gly Val Ser Val Ala Arg Glu Ile Glu Leu Glu Asp
          50          55          60

Lys Phe Glu Asn Met Gly Ala Gln Met Val Lys Glu Val Ala Ser Lys
65          70          75          80

Ala Asn Asp Ala Ala Gly Asp Gly Thr Thr Thr Ala Thr Val Leu Ala
          85          90          95

Gln Ala Ile Ile Thr Glu Gly Leu Lys Ala Val Ala Ala Gly Met Asn
          100          105          110

Pro Met Asp Leu Lys Arg Gly Ile Asp Lys Ala Val Thr Ala Ala Val
          115          120          125

Glu Glu Leu Lys Ala Leu Ser Val Pro Cys Ser Asp Ser Lys Ala Ile
          130          135          140

Ala Gln Val Gly Thr Ile Ser Ala Asn Ser Asp Glu Thr Val Gly Lys
145          150          155          160

Leu Ile Ala Glu Ala Met Asp Lys Val Gly Lys Glu Gly Val Ile Thr
          165          170          175

Val Glu Asp Gly Thr Gly Leu Gln Asp Glu Leu Asp Val Val Glu Gly
          180          185          190

Met Gln Phe Asp Arg Gly Tyr Leu Ser Pro Tyr Phe Ile Asn Lys Pro
          195          200          205

Glu Thr Gly Ala Val Glu Leu Glu Ser Pro Phe Ile Leu Leu Ala Asp
          210          215          220

Lys Lys Ile Ser Asn Ile Arg Glu Met Leu Pro Val Leu Glu Ala Val
225          230          235          240

Ala Lys Ala Gly Lys Pro Leu Leu Ile Ile Ala Glu Asp Val Glu Gly
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<212> DNA
<213> Escherichia coli

<220>
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<223> GroEL apical domain RYD modification DNA sequence

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<222> (598)..(606)
<223> CTGTCTCCT to CGTTATGAT

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<223> GAC to TGC

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<210> 6
<211> 548
<212> PRT
<213> Escherichia coli

<220>
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<223> GroEL apical domain RYD modification

<220>
<221> SITE
<222> (200)..(202)
<223> LSP to RYD

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<222> (490)..(490)
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20 25 30

Pro Lys Gly Arg Asn Val Val Leu Asp Lys Ser Phe Gly Ala Pro Thr
35 40 45

Ile Thr Lys Asp Gly Val Ser Val Ala Arg Glu Ile Glu Leu Glu Asp
50 55 60

Lys Phe Glu Asn Met Gly Ala Gln Met Val Lys Glu Val Ala Ser Lys
65 70 75 80

Ala Asn Asp Ala Ala Gly Asp Gly Thr Thr Thr Ala T